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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/822,997	04/13/2004	Jean-Marc Dortu	INFN/0080	4665
46798	7590	10/03/2005	EXAMINER	
PATTERSON & SHERIDAN, LLP 3040 POST OAK BLVD., SUITE 1500 HOUSTON, TX 77056			TRAN, ANDREW Q	
			ART UNIT	PAPER NUMBER
			2824	

DATE MAILED: 10/03/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/822,997

Applicant(s)

DORTU ET AL.

Examiner

Andrew Q. Tran

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 13 April 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>4/13/04 &amp; 7/29/04</u> . | 6) <input type="checkbox"/> Other: ____.  |

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 1-20 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

The specification has failed to adequately and sufficiently describe the "control device" (for example in claim 1, line 4) or the "control means" (for example in claim 14, line 4) for performing a destructive read command, a write command, a nondestructive read command, or a refresh command, as recited in the pending claims. A mere simple timing diagram, as depicted in Fig. 2, appears to be an unreasonably sufficient disclosure for such "control device" or "control means" for executing said defined commands, absent an exemplary embodiment.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-20 are rejected under 35 U.S.C. 112; second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Numerous claims recite the terms "opening" which appears to be indefinite. Clarification is required. Examples of such recitations are as follows : in claim 1, line 10; in claim 8, line 7; or

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in claim 14, line 8. Further in claim 8, line 5 and 7, the terms "the bit line" and "the word line" lack proper antecedent bases. It is suggested to change said terms to read --a bit line-- and --a word line--, respectively. In claim 9, line 2, the phrase "a destructive write command for writing data from ....." is indefinite because said phrase is unclear in light of the specification. The present specification describes a normal write command at the most.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-20 are rejected under 35 U.S.C. 102(b) as being anticipated by Vishin (US Pat 6,178,479 hereafter "Vishin"). See the Figs. and col. 3, ln. 14-17.

Vishin discloses a memory device comprising a core memory 102 and a cache control 108 for performing a destructive read command as recited in claim 1 (see Fig. 2 and step 208 therein), or a nondestructive read command as recited in claim 3 (see also Fig. 2 and steps 208 and 206). Note further that, as recited in claim 1, the steps performed by the destructive read command of biasing a bit line, biasing a word line, and sensing data stored in a memory cell are all standard steps necessary for a conventional read command. As to claim 2, see Fig. 3. As to claim 4, see Fig. 4. As to claims 5 and 6, see col. 2, ln. 41-67 and further note that SRAM cache 106 is considered a part of Vishin's memory device. As to claim 7, a cache has long been considered and used as a buffer memory.

Claims 8-20 are rejected under substantially similar grounds.

**Conclusion**

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Jinbo et al. (US Pat 5,608,682) describes a semiconductor memory device.

Ji et al. (US Pat 6,801,980) describes a destructive-read random access memory system buffered with destructive-read memory cache.

Maruyama et al. (US Pat 6,879,540) describes a synchronous semiconductor memory device having dynamic memory cells and operating method thereof.

Nong (US Pat 6,885,591) describes a packet buffer circuit and method.

Dortu et al. (WO 2005/008674) describes a semiconductor memory having a short effective word line cycle time and data read-out method thereof.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andrew Q. Tran whose telephone number is (571) 272-1885. The examiner can normally be reached on Mon - Fri 8:30 AM - 5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard T. Elms can be reached on (571) 272-1869. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Andrew Q Tran  
Primary Examiner  
Art Unit 2824

at  
September 29, 2005